33rd Stem Cell Club Meeting

(Organised by the Stem Cells Research Singapore Website Committee http://www.stemcell.edu.sg)

Date: March, 13th, 2008 (Thursday)

Time: 5:30 pm

Venue: Breakthrough Theatrette, Level 4, Matrix

Host: Mike Jones, IMB

Time Title

5:30-6:30 Stem/progenitor cells in lung development and repair

6:30 - Wine at cheese: (at Invitrogen Supply Center, 4th floor, Chromos)

Speaker

Brigid Hogan
Duke University
Medical Center,
Durham, USA



Stem/progenitor cells in lung development and repair

Brigid Hogan, Duke University Medical Center

The lung is a vital organ made up of epithelial and mesenchymal cell types specialized for different functions. Unlike organs such as the skin and gut, cell turnover in the adult lung is very low. However, the organ does have some ability to repair itself after damage caused, for example, by toxic chemicals and infection. Currently, there is some controversy over the identity and potential of epithelial cells that build and repair the mammalian lung. Over the past few years we have generated new conditional mouse mutants designed to exploit the power of conditional Cre/loxp technology for addressing these questions, and for tracing the lineage of specific cell types. The results of ongoing experiments will be described, as well as future plans.

Biography

Brigid Hogan, PhD, FRS is the George Barth Geller Professor and Chair of the Department of Cell Biology, Duke University Medical Center. She is also Director of the Duke Stem Cell Program. Prior to joining Duke, Dr Hogan was an Investigator of the Howard Hughes Medical Institute and Hortense B. Ingram Professor in the Department of Cell Biology at Vanderbilt University Medical Center. Dr. Hogan earned her PhD in Biochemistry at the University of Cambridge. After completing her PhD, she was a postdoctoral fellow in the Department of Biology at MIT. Before moving to the United States in 1988 Dr Hogan was head of the Molecular Embryology Laboratory at the National Institute for Medical Research in London. Her research currently focuses on the genetic control of embryonic development and morphogenesis, using the mouse as a model system. She currently has a particular interest in stem cells of adult endodermal organs, including the lung and esophagus, and their role in organ turnover and repair. She was President of the American Society for Developmental Biology and is President-elect of the American Society of Cell Biology. Her service to the scientific community has included being a member of the National Advisory Council of the National Institute of Child Health and Human Development, Co-Chair for Science of the 1994 NIH Human Embryo Research Panel and a member of the 2001/2002 National Academies Panel on Scientific and Medical Aspects of Human Cloning. Dr. Hogan is a Fellow of the Royal Society of London and the American Academy of Arts and Sciences, and a member of the Institute of Medicine and the National Academy of Sciences, USA.